ISSUE BRIEF

Healthy Aging in North Carolina

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The "longevity revolution" is here. Regardless of whether any North Carolinians born today will live to the 120 to 150 years projected by Dr. Robert Butler at the International Longevity Center,[1] North Carolina's current older population is nevertheless growing in size and in age. By 2030, North Carolina's older adult population (aged 65 and older) will more than double to over 2 million and the very old population (aged 85 and older) will increase 150% to about 250,000.[2] Life expectancy, or the number of years the average person can expect to live, has been increasing, especially at older ages. For example, in 1990 an individual aged 75 could expect to live another 10.9 years, but in 2005 that projection grew to another 12 years.[3] But are those added years healthy years? What can be done to ensure that North Carolinians age healthily?

What is Healthy Aging?

Healthy aging is more than the absence of disease or disability in old age; it is a lifestyle responsibility shared by the individual, community, and state. Seeking to define healthy aging, an increasing number of committees and research groups use some variant of the West Virginia Rural Healthy Aging Network's definition: "Healthy aging is the development and maintenance of optimal mental, social, and physical well-being and function in older adults. This will most likely be achieved when communities are safe, promote health and well-being, and use health services and community programs to prevent or minimize disease."[4]

Healthy aging as a construct enhances the concept of successful aging popularized by Rowe and Kahn's 1987 article.[5] In that article, they contended disease tainted what was normal aging, and it was possible to age *disease free* with little, if any, cognitive decline. Modified in 1998, their enhanced definition of successful aging included 3 criteria: (1) absence of disease, disability, and risk factors; (2) maintaining physical and mental functioning; and (3) active engagement in life both with other people and in productive activities.[6] The limitation of this model necessitated older adults simultaneously must meet all 3 criteria, thus defining many aging people as unsuccessful. Moreover, the influence of past life course events and the social and structural factors influencing individuals' health and lives were excluded. Critics note this "all-or-nothing" model results in unintended consequences such as discouraging older adults and others to change behaviors, limiting health care, labeling and blaming those not fitting the successful aging model, and creating an ideal which may be unattainable by many adults.[7]

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A Life Course Framework of Healthy Aging

The multidimensional concept of healthy aging includes the older adults' physical and cognitive health status, social engagement, and environmental and life course factors. As an active process, one can enter at any point across the life course and the process may be modified as needed. Healthy aging is not only the individual's responsibility but that of multiple stakeholders. Health research over the past few decades has become attentive to the relationship that social status, socioeconomic inequalities, gender differences, stress, environmental factors, and the political economy have on health outcomes.[8] Health is shaped by the time period in which one is born and these

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influences throughout the life course; thus, at any point in time there may be a convergence of the current and the past. Familiar to health measures grounded in research and best practices, health care workers and practitioners may neglect to factor in earlier disadvantages when considering an older adult. Osteoporosis, for example, does not begin in old age but with nutrition as a child. As such, concerns regarding healthy aging must be addressed across the life course.

The life course framework has been very influential in social gerontology, emphasizing the interaction of period (historical events), an individual's decisions, and the effect these decisions have on middle and older age outcomes.[9] It is a framework that lends itself to the understanding of how those with improved sanitation and nutrition, better health care, acceptable living arrangements, and higher education throughout their lives have had better health outcomes.[8] Those without such conditions may have poorer health outcomes due to factors beyond their control.

Who is aging more healthfully? Is it a 60-something rural North Carolinian grandmother who never attended college and works in a service job, has had limited access to heath care, is raising grandchildren, and cooks as taught by her mother but is overweight with hypertension? Is it the highly educated, world traveled 60-something professor who has had health insurance for 30 plus years, enjoys the best quality of foods and red wine but is also overweight with hypertension? Perhaps neither! But factoring in life course experiences and resources available in the community when recommending healthier aging lifestyles will almost certainly result in better health care outcomes.

This issue of the *North Carolina Medical Journal* focuses on the multidimensional concept of healthy aging. Together, the articles have an important message for health care providers, the community, and the older adult: "We all need to work together and share the responsibility to increase the quality of life for all North Carolinians."

Leading the Way: North Carolina's Roadmap for Healthy Aging

Dennis Streets, director of the Division of Aging and Adult Services, Dr. Leah Devlin, state health director and director of the the Division of Public Health, and Dr. Tiffany Shubert, a research scientist at the Institute on Aging at the University of North Carolina at Chapel Hill, introduce us to the partnering of state, county, and other agencies in producing county-level health information specific to older adults. This information will be used in the development and implementation of health promotion programs specific to each county's need. As they correctly note, the increasing popularity of North Carolina as a retirement destination coupled with the natural increase of the our older adult population has the potential to strain services and budgets unless health is addressed proactively and collaboratively through organized efforts. *The North Carolina Roadmap for Healthy Aging* leads these efforts. The sidebar commentary by Erin Russell, also of the Division of Aging and Adult Services, provides unique examples of successful community-level initiatives directed at increasing healthy lifestyles. Encouraging use of community-level programs by health care providers will improve the health of both the community and the individual.

Responding to the high rate of chronic health conditions in North Carolina's older adults, primary care physicians may have little time to study and work with the rest of the aging population. Many voice challenges ahead with the growth of our current older adult population and the aging of the boomers. But rather than being naysayers, the authors in this issue of the *Journal* present positive measures that individuals, communities, and the state are doing to improve the health of older adults in North Carolina. Optimistic in her commentary on the future of older adults, Bonnie Cramer, chair of the AARP Board of Directors, directs our attention to AARP's proactive role in leading change for 50 years. She illustrates how she and others will continue to work together to build healthy communities.

Guiding Healthy Aging

Few physicians specialize in geriatrics. In 2007, the American Medical Association reported only 2,848 active primary care geriatric specialists. As a result, the ratio of geriatric specialist to the population is 1 for every 104,700 people. To provide some context, for each family medicine/general practice primary care specialist, there are 3,000 people or a ratio of 1 to 3,000. But the population is aging and physicians are treating greater and greater numbers of older adults. In 2005, 98% of medical schools included some geriatrics education within a required course.[10] However, a review of the geriatric competencies for current medical students proposed by the 2007 Geriatrics Consensus Conference finds no reference to healthy aging, only pathologies.[11] Associating aging with disease and not including healthy aging should be a cause for concern among physicians caring for older adults.

Duke University Medical Center's Dr. Mitchell Heflin focuses on the heterogeneity of older adults and the decisions practitioners face when screening and determining preventive options to encourage healthy aging. Dr. Heflin introduces a range of preventive primary, secondary, and tertiary measures, with application for use from the well to the frail older adult.

For many older North Carolinians and their families, the fear of aging with Alzheimer's disease or related memory disorder is real. A 64% increase in Alzheimer's disease alone (mild, moderate, and severe) is projected in the 20-year period of 2000 to 2020 for North Carolina's older adults.[12] Dr. Kathleen Hayden of the Bryan Alzheimer's Disease Research Center discusses recent studies that suggest the healthy lifestyle of good diet, exercise, and cognitive "workouts" may do more than lower cardiovascular risk; they may prevent or delay the onset of functional and cognitive decline.

Educating Leaders in the Profession

Collectively, all the authors in this issue of the *Journal* address the impact that aging boomers will have on the future health of North Carolina. Preparing for this aging population

means educating North Carolina's leaders in the profession. Dr. Irene Hamrick from the East Carolina University Medical School, and Drs. Laurie Kennedy-Malone and Beth Barba, both of the University of North Carolina at Greensboro School of Nursing, discuss the need to make geriatric medical training and gerontological nursing more attractive to a specialized workforce. At a time when the demand is increasing, participation and funding in geriatric fellowship programs has declined. Examining geriatric medical programs across the state, the authors provide an excellent overview of educational opportunities available and propose productive models that infuse gerontology and geriatrics into established curriculum to expand geriatric training. Going beyond traditional medical and nursing schools, Sandra Crawford Leak, of the Gerontology Program at the University of North Carolina at Greensboro, and Dr. Jim Mitchell, director of the East Carolina University Center on Aging discuss current innovative gerontology educational initiatives in North Carolina directed to the student and current service provider populations.

Population- and Individual-Level Challenges to Healthy Aging

North Carolina's population has become increasing racially and ethnically diverse. Resources have become gradually more stretched attempting to meet the needs of immigrants, especially older immigrants, while continuing to meet the needs the native-born minority older adults. These 2 populations share common themes of barriers to services and financial difficulties. Both, on average, experience poorer health than the rest of North Carolinas population. Sarah Lowman and Rebecca Hunter, of the Center for Aging and Health at the University of North Carolina at Chapel Hill School of Medicine, together with Swarna Reddy, from the North Carolina Division on Aging and Adult Services, discuss the new diversity within North Carolina's population and issues facing health care practitioners who work with older immigrants. Kathryn Lanier, an ombudsman at the North Carolina Division on Aging and Adult Services, provides the reader examples of successful outreach programs designed to empower and encourage community and individual responses to minorities and immigrant health care education and outreach.

Communities and the state have developed and continue to develop programs that educate and promote lifestyles leading to better health outcomes at older ages, but it is the individual who must act. Lack of exercise and poor nutritional habits plague older adults. Nearly two-thirds of those aged 50 and older are either overweight or obese. Incidence of diabetes continues to rise at all ages. The combination of these factors is reducing quality of life and draining health care resources. Dr. Martha Taylor, from the University of North Carolina at Greensboro's Department of Nutrition, Burgin Ross, a Triad area nutritionist, and Carinthia Cherry, also of the University of North Carolina at Greensboro, present current and successful intervention programs established at universities, in communities, and by the state aimed at combating the dual problem of obesity and diabetes—a condition now termed "diabesity." Also critical to combating diabesity and increasing quality of life is exercise. As a lifestyle behavior, exercise and weight loss, independently and together, increase positive outcomes at all ages. Understanding healthy exercise at older ages is therefore important. But according to Dr. William Karper, an associate professor in exercise and sport science at the University of North Carolina at Greensboro, social barriers exist to initiating a physical activity program. When encouraging an exercise regime to an older adult, physicians should consider recommending community-level resources such as neighborhood, social club, or faith-based groups, in addition to local health clubs. The positive role that physical activity participation in North Carolina Senior Games has for older adults is discussed in a sidebar by Brad Allen, president of the North Carolina Senior Games and an enthusiastic supporter of the games. With a 25-year history, the Senior Games continue to provide older adults with the opportunity to participate competitively in athletic events and, by expanding its wellness mission to year-round programs, continues to encourage and model healthy aging lifestyles.

Healthy Environments, Healthy Choices, Healthy Aging

Uncommon to discussions of healthy aging is attention to workplace, institutional, and home environments. However, adapting the environment for older adults' needs should be a healthy aging priority, due to the fact that over one-third of adults aged 65 and over have reported falling, and falls are the leading cause of injury death for adults aged 65 and over in the United States.[13] Candace Roberts, an assistant professor in interior design at Western Carolina State University, introduces the reader to public and private space modifications that will help these spaces become more amenable to an aging society. Ellen Schneider, of the University of North Carolina Institute on Aging, brings our attention to community-level evidence-based falls prevention programs as well as the role that the newly established North Carolina Falls Prevention Coalition is playing in providing education and resources around falls prevention to health care practitioners, policy makers, and the community.

Dr. Ronald Manheimer, executive director for the North Carolina Center for Creative Retirement at the University of North Carolina at Asheville, offers a unique perspective for the physician planning for future retirement. Noting the investment, commitment, and stress physicians experience during their careers, transitioning to a healthy retirement may be especially difficult. Dr. Manheimer recommends not only planning financially for retirement but also offers creative retirement options that would allow the physician to remain healthfully engaged. While written for the physician, we should all consider his recommendations.

Achieving Healthy Aging for all North Carolinians

Gains in health outcomes for older adults in the past few decades have been substantial. Not only are older adults living longer, but the years added are healthier years. However, negative

perceptions of older adults and aging continue to reinforce long-standing stereotypes. Dr. Gordon DeFriese, professor emeritus at the University of North Carolina at Chapel Hill and Dr. Carol Hogue, retired associate dean of the University of North Carolina at Chapel Hill School of Nursing, illustrate the continued difficulty in "sensitizing" service providers and the public to view older adults as healthy, productive, independent people. An issue for our society will be the acceptance of older adults who are healthy and those who are not. Healthy older adults challenge current norms and expectations of society of the aging population.

Healthy aging necessitates changes in health care delivery systems for North Carolinians of all ages. There is more to healthy aging than simply living longer. As people age, they want their added years to be productive and active, both physically and mentally. Older adults want to be independent, which includes financial independence. Critical as health is to the older individual, healthy aging is critical to cost savings for families and society. The goal of healthy aging becomes shared by many stakeholders: the individual, the health care provider, the family, and the community.

Understanding the complex role that life course factors have on health and aging amplifies the critical need for all North Carolinians to have health care access, proper nutrition, physical activity, and education at all ages. This issue of the *North Carolina Medical Journal* has illustrated only some of the many ongoing health care initiatives here in North Carolina that are directed at improving the health of our older adults. Natural aging and the attraction of North Carolina to retirees offers much potential: the potential to use the creative resources of older adults for the state's good and the potential to promote healthy lifestyles across the life course at the individual, community, or state level. Unaddressed, the aging of North Carolina offers the potential to deplete valuable resources devoted to preventable health problems. The people of North Carolina need to remain committed to healthy aging as an achievable goal. **NCMJ**

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